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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,538	01/10/2002	Abraham J. Domb	PG 100	9167

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EXAMINER

KRISHNAN, GANAPATHY

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 04/08/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,538

Applicant(s)

DOMB, ABRAHAM J.

Examiner

Ganapathy Krishnan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: . |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because the title of the invention appears at the top. The title should be removed. Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 1(c) and 2(c) and are objected to because of the following informalities: The term ‘carbons’ should be replaced with the term ‘carbon’. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2 recite an amount of saccharide. It is not clear if the term amount refers to the range 2 to 2000 that is recited or amount refers to weight of the polysaccharide. If applicants mean weight by the term amount then the weight should be recited. The recitation “directly grafted” is confusing. It is not clear if the term grafted means a covalent bond between the said oligoamine and the polysaccharide. The recitation “from the group consisting of a linear,

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branched and cyclic” is an improper Markush language. The ‘and’ in this recitation should be replaced with the term ‘or’. Improper Markush language is also seen in claims 4,5,7,11,14 and 20. Claims 1 and 2 also recite the terms hydrophobic and amphiphilic groups. The claims further recite what the groups include but fail to recite a chemical name or structure for the hydrophobic or amphiphilic groups.

Claim 2 (c) seems to be missing text after the terms “complexed with”. This renders the claim indefinite. If the anionic macromolecules recited in 2(d) are involved in the complexation then the recitation in 2(d) should be included after the terms “complexed with” in 2(c).

In Claim 8 it is not clear what ‘side group’ means.

Claims 10 and 12 recite the terms ‘spermine and derivatives’ and ‘cholesterol derivatives’ respectively. In the absence of a chemical name or structure it is not clear what the term derivatives means and renders the claims indefinite.

In claim 18 the recitation ‘predetermined type of cell or tissue’ is vague and renders the claim indefinite. One of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 23 recites ‘wherein used as a scaffold’. It is not clear what is being used as the scaffold. If it is the polycation composition, then it should be recited after the term ‘wherein’.

Claim 24 is seen as a duplicate of Claim 1. The use of the said composition in non-medical coatings in the printing and electronic industry is intended use and is not given patentable weight.

Claims which depend from rejected base claims are rejected for reasons of record.

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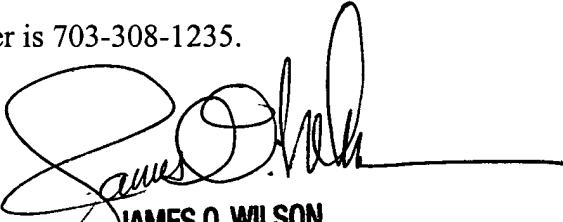
The closest prior art of record is seen to be Liotta et al (WO 98/27209) drawn to polycationic oligomers and Genzyme Corporation (WO 97/46223) drawn to compositions comprising cationic amphiphilies and co-lipids.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 703-305-4837. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

GK
April 6, 2003



JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600